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ABSTRACT
        This guide to the Internet is geared toward special
education teachers. Descriptions of various resources, including
discussion groups (sometimes known as LISTSERVS) or conferences that
appear to be beneficial for educators who instruct students with
learning disabilities, are provided. The explosion in communication
via the information superhighway is discussed. The World Wide Web and
SPEDTALK, a forum for people to discuss current issues about
practices, policies, and research in special education, are described
and evaluated. Individual testimonials on the helpfulness of the
Internet are recounted. Examples from SPEDTALK in their original form
are provided. Caution is given to users on the amount of material
they may receive through electronic mail. (CR)

ED 397 586

The Internet: A Special Resource for Special Educators

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ERIC
Full Text Provided by ERIC

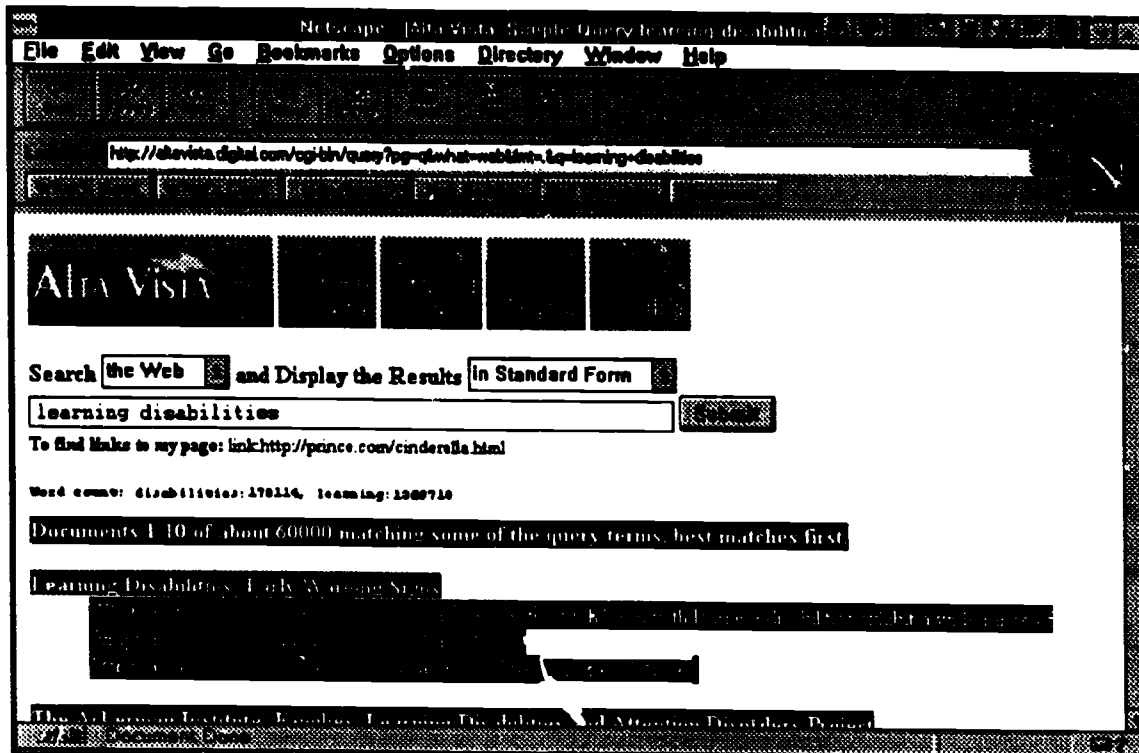# The Internet: A Special Resource for Special Educators

<u>Introduction</u>

It took between 100 and 200 years to move through the agricultural age, through the industrial age to the communication and information age. In each of the ages there were winners and losers. In the agricultural age, those who had the best hunting and gathering skills won. The people who could quickly manufacture qualilty goods were the winners in the industrial age. It also follows that those who can gather and process information will win in the information age. The Information Superhighway has become and invaluable tool in the dissemination of and the quest for information. The Internet has become a major factor in deciding who will win and who will lose in the information age!

Everyone is rushing to join the Internet! It has become *"essential"* to have an Internet e-mail address. In many cases, educators have not only joined the charge for the Internet, but lead the way in developing strategies for unique uses of this technology in the curriculum. The information highway is expanding with exponential acceleration. Along with this rapid growth, elements that are both positive and negative have emerged. This paper examines the Internet's value to those concerned with special education and catalogues many of the resources that may prove to be important tools for the teachers of students with learning disabilities.

Cyberspace poses challenges to the uninitiated and the 20,000 each day who use the Internet for the first time. With more than 20 million computers connected to the net and with more than 60 million users searching for and adding to information databases, Cyberspace can often seem like an unmanageable tangle of trivia (the Internet population is doubling every 8 to 10 months (Krol, 1992; Lewis, 1995; Thornburg, 1994). However, it is encouraging to note that as the Internet evolves, the ability to search for resources is becoming less painful. Occasionally, the precise information that is desired is indeed available, but it might be buried among other files or may not even be indexed to permit efficient searches to locate the perfect reference. It is estimated that the Internet already contains more than 30,000 times the amount of material held in the Library of Congress. The Internet itself has been compared to the Library of Congress -------- after an earthquake!

Many new search engines, as they are called, make navigating and locating relevant material somewhat easier. For example, when the Altavista search engine at URL http://altavista.digital.com/ was queried for *learning disabilities*, the following page was illustrated. Notice that only documents 1 - 10 of about 60000 are shown initially.

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File Edit View Go Bookmarks Options Directory Window Help

http://altavista.digital.com/cgi-bin/query?pg=q&what=web&fmt=.&q=learning+disabilities

Alta Vista

Search [the Web] and Display the Results [in Standard Form]

learning disabilities

To find links to my page: link:http://prince.com/cinderella.html

Word count: disabilities: 178116, learning: 1989710

Documents 1-10 of about 60000 matching some of the query terms, best matches first.

Learning Disabilities: Early Warning Signs

The Ackerman Institute: Families, Learning Disabilities and Attention Disorders Project
    Families, Learning Disabilities and Attention Disorders Project. Project Director:
Gillian Walker, A.C.S.W.Project Staff: Susan Shimmerlik, Ph.D., Patricia Heller, M.S.,...
    http://www.behavior.net/orgs/ackerman/learndis.html - size 3K - 17 Feb 96

University Program for Learning Disabilities (UPLD)
    Services for Students with Learning Disabilities at the University of Connecticut.
Through the University Program for College Students with Learning Disabilities
(UPLD),...
    http://www.ucc.uconn.edu/~djb94005/page3.html - size 13K - 26 Feb 96

Converting the Cultural Menagerie: Overcoming Organizational Learning Disabilities
    CONVERTING THE CULTURAL MENAGERIE: OVERCOMING
ORGANIZATIONAL LEARNING DISABILITIES by Philip Modiano, Michelangelo
Barbera, and Friedrich Bock. One of the vexing...
    http://www.adlittle.com/prism3q95/p3q95_4.html - size 2K - 11 Jan 96

Dyslexia and Learning Disabilities
    Dyslexia and Learning Disabilities. Yahoo Guide to Dyslexia and Dyslexia
Organisations. Hensa Dyslexia Archive.
    George's Links University of Ulster. Dyslexia 2000 run by...
    http://www.physiol.ox.ac.uk/mcdp/dyslexia.html - size 1K - 26 Feb 96

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No Title
> Learning Disabilities. Academic success at the university level provides a challenge for all students. If you are a student with a disability--learning or otherwise, you...
>   http://garnet.berkeley.edu/~cw/studying/learningdisabilities.html - size 5K - 17 Feb 96

Learning Disabilities Research and Training Center
> University of Georgia and Roosevelt Warm Springs Institute for Rehabilitation. What's New at the LDR&T Center? "Beyond Ritalin...issues for Adults and Adolescents with...
>   http://www.coe.uga.edu/LD/ - size 2K - 26 Feb 96

Accessing the National Adult Literacy and Learning Disabilities Center
> National ALLD Center Academy for Educational Development 1875 Connecticut Avenue, NW Washington, DC 20009-1202. Phone: 202/884-8185 800/953-ALLD (953-2553) FAX:...
>   http://novel.nifl.gov/nalld/nalldacc.htm - size 1K - 17 Jan 96

National Adult Literacy and Learning Disabilities Center Staff
> Washington Office: Neil Sturomski, Director Eve Robins, Sr. Information Specialist Adrienne Riviere, Information Specialist Charles Washington, Program Associate/Editor...
>   http://novel.nifl.gov/nalld/nalldstf.htm - size 1K - 17 Jan 96

National Adult Literacy and Learning Disabilities Center Mission
> The National ALLD Center promotes awareness about the relationship between adult literacy and learning disabilities, builds the capacity of literacy practitioners to...
>   http://novel.nifl.gov/nalld/nalldmis.htm - size 2K - 17 Jan 96

In this paper, the authors will provide descriptions of the various resources, including discussion groups or conferences that appear to be beneficial for educators who instruct students with learning disabilities. The descriptions will contain examples of the dialogue and the procedure for accessing and/or joining the group.

It should be noted that the authors do not attempt to examine all resources that are available on the Internet. Also, they do not endeavor to examine the moral or ethical issues and assumptions that are emerging along with the character of the Net. However, the authors do supply an overview of some resources and hopefully spark the readers interest to attain more information about the technology and its advantages.

COMMUNICATION IS THE NAME OF THE GAME

With more than 170 countries now providing some type of Internet access, Governments around the world have been earmarking large sums of money to the development of the "I-way" within their countries. For example, the Vice President of the United States stated that by the year 2000 all classrooms, libraries and hospitals will be connected to the information highway. The most current estimates inform us that the network of all networks- Internet, is adding new users and computers at about 10 to 15 percent per month (Thornburg, 1994). About half of these are businesses. However, it is also interesting and frustrating to note that most people on Earth live more than two hours

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from the nearest telephone and that more than three billion people have never made a phone call.

The Information Superhighway allows fast communications with peers who share the same interests but may live on the other side of Earth. Also, because this medium is time and place independent, renowned consultants can interact with colleagues on a large scale or one-to-one basis when they choose and from a location that is convenient. Because the net is awake 24 hours a day for 365 days a year, information and communication is available whenever it is required.

Teacher support and special education are very good examples of the usefulness of the Internet. Hundreds of discussion groups have emerged that allow educators to interact with other professionals and pose questions, give answers or sit back and observe the interchange of ideas and resource recommendations. Resource and discussion groups like Schoolnet and Kidsphere often entertain dialogue that investigates learning disability issues.

In addition to the conferences on the Internet, the World Wide Web is another cyberspace resource that requires different software but permits you to access additional information. Once on the WWW, traveling is even easier with one source pointing to others in a graphic interface. In many cases, your first exposure to the WWW will be the Home Page. Once here, clicking on any of the topics listed will provide new sites with additional information. It is this writer's experience that WWW information is not as interactive as the listservs on the Internet, but that information regarding programs, associations, events, schools, universities and topics such as special education is up-to date and relevant.

In the following sections, we will include descriptions of several lists that are pertinent to special education, examples of the interactions and how to subscribe to the discussion groups. But first, we will examine the initial thoughts of one of the authors first encounters with discussion groups.

"I began my analysis of discussion groups (known formerly as LISTSERVS) by searching for those that focused primarily on issues relating to learning disabilities. Themes related to this include: teachers looking for practical strategies, teachers looking for information on particular syndromes and any related topics concerning LD research issues.

The type and amount of information which can be gathered is endless. As a neophyte driver on the information highway, I was amazed at how easy a route it is to travel. I was also amazed at the variety of twists and turns it takes and the number of fellow travellers it carries. Please note that the information I learned about travelling on this highway is relatively new having only been discovered in the previous three months.

My travels have remained unidirectional e.g. focused on primarily on learning disabilities and secondarily on special education. The first route I took was a highway known as SPEDTALK. This list serve (the name given to a dedicated route) covers a variety of general special education issues. SPEDTALK is described as follows:

"Spedtalk is hosted by the University of Virginia. It is a forum for people to discuss current issues about practices, policies, and research in special education. Although many of the long-standing participants in spedtalk are affiliated with institutions of higher education, either as students or professors, the list is open and

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includes people from other backgrounds as well, particularly teachers, researchers, and clinicians.

The next three messages are taken directly from SPEDTALK and illustrate a thread that was followed by many members of this group.

Date: Wed, 7 Feb 1996 21:32:55 -0500 (EST)
From: Tyrone Brabin ◇
To: "Denise Tracks" ◇
Cc: SPEDTALK@uvaarpa.virginia.edu
Subject: Re: Punishment in school

I would like to share a story. Last Friday one of my students had a bad morning. Out of a 25 possible morning behavior management points he only earned 15. For this reason he was unable to go "out for lunch" that day. This simply means that he had to sit in a room with a teacher for 20 minutes and then got 15 minutes to relax, take a break... Well anyway, this young man didn't bring lunch that day so he needed to buy it from a lunch truck that comes to our school. He wasn't finished eating in time for 7th period, which was gym. Now, he was already very upset about getting in trouble and losing points and then his teacher (homeroom) lectured him for a while and then he wasn't finished eating when the bell rang. I happened to be in his homeroom at the time because his teacher and her assistants were not. This young man started to cry from all the frustration.
I started speaking to him in a soothing manner and listening to his frustration. At this point his teacher came back in angry because she overheard him speaking loudly and refused to let him finish his lunch. I unfortunately had to leave at this point because I had a class coming to my computer room. I had calmed him down by the time I left and asked that he be allowed to finish eating (not in his presence). The other teacher did not honor my, or his request. She also insisted he go to gym. (This is an Independent Living Skills class with low functioning LD students) At this point the student began kicking walls and yelling. He was brought up to our time out room screaming. I got very angry. This whole problem IMHO could have been avoided because he really wasn't emotionally ready to go to the bathroom, much less another class. This poor young man (16 yrs old) was sobbing in the time out room. I pushed my way in and again calmed him down and then made sure he got his lunch. I tried discussing this with the other teacher but she didn't hear a word I said! I had this student in my class 2 years ago and have remained very close to him and his family which is why I knew so much and intervened. I really felt that the other teacher was unnecessarily cruel. What do you all think?

From: Boeman@aol.com

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To: tyrone@rzd.rickjohns.edu
Cc: spedtalk@virginia.edu
Subject: Re: Punishment in school

In a message dated 96-02-07 21:42:53 EST, you write:

>he really wasn't emotionally
>ready

Unfortunately, teachers (all, myself included) need to learn the difference
between reactive and proactive. I think the teacher in your story reacted,
while you were trying to be proactive.Sometimes, I have found that regular
ed. teachers do not have a handle on how a student's behavior can escalate
out of control It's the real world, though, isn't it?
Oh by the way, I agree with how you saw the incident.

Gail
in Ohio where it's supposed to hit the 40's today

Date: Thu, 8 Feb 1996 08:03:16 -0500
From: Boeman@aol.com
To: ralihan@
Cc: spedtalk@virginia.edu
Subject: Re: Punishment in school

In a message dated 96-02-08 02:07:38 EST, you write:

>If good things have happened for you today, rejoice.
>If they haven't, anticipate.

Peter, where you bean? Haven't seen any of your posts for a long time. You
certainly nailed that one down concerning the confrontation story about the
student's escalating poor behavior: unprofessional, you said. Absolutely.
And the above "if good thing...." is excellent. I must write that one down.
That's one to live by for sure.
Gail in Ohio
appreciating succinct responses

Over the past seven months traveling on the various roads has been highly
informative, mildly entertaining and at times, very frustrating. Recently, on a listserve the
"owner" (as the individual who maintains the list is called) had to send out an
admonishment to all subscribers advising them to maintain appropriate decorum in their
messages, avoid derisive comments and certainly avoid personal attacks. Though this is a
risk when entering the information highway, it can be avoided by carefully examining the
road before you travel it. Many lists are well-maintained and subscribers are careful to

keep their comments on a "professional" level. It is certainly suggested here that if you find otherwise, you cancel your subscription immediately.

The day I became involved there was a debate on the proper use of behaviour modification including issues related to teacher education in this area. There is an ongoing debate related to facilitate communication, issues over a film advocating inclusion and more recently learning disabilities and its relation to generational factors. As an example of the information which may be obtained from this listserv -please examine the following:

Date: Wed, 27 Mar 96 13:09:50 CST
From: beid@
To: spedtalk@virginia.edu
Subject: tough times

I thought I'd share this Daily Report Card item with the spedders

CHICAGO'S SPECIAL ED PROGRAMS: FEDERAL FUNDS ARE
ESSENTIAL
    Chicago school officials can boast of the quality of services
they provide special-needs students (Heard, CHICAGO TRIBUNE, 3/9).
The public schools typically out-perform area private schools,
writes the paper. "I've been to several private and parochial
schools, and you just cannot find the kind of special ed services
you get in Chicago public schools," explained parent Susan Edwards.
    Stock School, a facility specifically designed for pre-school
children, has been touted an exemplary model. Among its special
services, Stock provides hand-held communication devices, valued
at $1,000 and mobile "standers" that help students walk, valued at
$3,800. The school's team of full-time nurses and physical and
occupational therapists aims to encourage children to become as
independent as possible, notes the paper.
    However, in tough fiscal, budget-cutting times, Stock's
federal Chapter I funds are in jeopardy, as school officials
threaten to dip into the Chapter I pot to offset the district's
$290M deficit. The TRIBUNE reports that despite popular opinion
that the supplemental funds are a luxury for schools, the support
is in fact integral to Stock's mission. The $71,000 the school
receives annually in Chapter I money pays for padded furniture for
children with cerebral palsy, wheelchairs, soft food and special
eating utensils and field trips to stimulate responses in children
who have difficulty responding. In other words, Chapter I funds
essential supplies and services, writes the paper.

In order to get on this list simply send an e-mail message to
majordomo@virginia.edu with **"subscribe spedtalk"** as your message content. Shortly
after doing this you will get an e-mail message back welcoming you to Spedtalk and
asking you yo provide some introductory information. Once you've done this (and its not
required) you simply g   your messages each day, follow the dialogue and if you feel so
inclined jump in at any time.

A recent discussion on Spedtalk concerned effective practices for teaching LD students.
This led to the following response:

Stan Davis wrote asking what approaches are supported by research
and asked where he could start reading. For academic behaviors, I would
recommend the following list. Most of the references focus on academic instruction
for students with learning disabilities, but much of it would generalize to
others with mild disabilities (and probably to many other learners). The
Mercer and Mercer text that I have listed is a comprehensive text with many
references to studies. The others are reviews of literature or "classic"
works.
    One reference that I would like to include is a review of the
effectiveness of direct instruction. However, I can't find it; I am moving
and everything is in boxes. It was written by John Lloyd, however. John,
could you provide us with that reference? If I remember correctly, it was
not a journal article, it was a chapter in a book.
    For social behaviors, I have included a couple of texts at the end
of this post.

Academic behaviors:

Brophy, J. E. (1979). Teacher behavior and student learning. Educational
Leadership, 37(1), 33-38.

Christenson, S. I., Ysseldyke, J. E., & Thurlow, M. L. (1989). Critical
instructional factors for students with mild handicaps: An integrative
review. Remedial and Special Education, 10(5), 21-31.

Crank, J. N., & Bulgren, J. A. (1993). Visual depictions as information
organizers for enhancing achievement of students with learning
disabilities. Learning Disabilities Research and Practice, 8(3), 140-147.

Deshler, D. D., & Schumaker, J. B. (1993). Strategy mastery by at-risk
students: Not a simple matter. The Elementary School Journal, 94(2),
153-167. (There may be better references than this one for metacogntive
strategies. There is a great deal of research supporting the teaching of
metacogntive strategies. Much of that research comes Deshler and friends
at the Kansas University Institute for Research on Learning Disabilities.)

Englert, C. S. (1984). Effective direct instruction practices in special education settings. Remedial and Special Education, 5, 38-47.

Fuchs, L. S., & Fuchs, D. (1986). Effects of systematic formative evaluation: A meta-analysis. Exceptional Children, 53, 199-208.

Graham, S., & Johnson, L. A. (1989). Teaching reading to learning disabled students: A review of research-supported procedures. Focus on Exceptional Children, 21(6), 1-12.

Hudson, P., Lignugaris-Kraft, B., & Miller, T. (1993). Using content enhancements to improve the performance of adolescents with learning disabilities in content classes. Learning Disabilities Research and Practice, 8(2), 106-126.

Isaacson, S. L. (1987). Effective instruction in written language. Focus on Exceptional Children, 19(6), 1-12.

Lloyd, J. W., & Keller, C. E. (1989). Effective mathematics instruction: Development, instruction, and programs. Focus on Exceptional Children, 21(7), 1-10.

Lovitt, T. C., & Horton, S. V. (1994). Strategies for adapting science textbooks for youth with learning disabilities. Remedial and Special Education, 13(2), 105-116.

Mastropieri, M. A., Scruggs, T. E., & Shiah, S. (1991). Mathematics instruction for learning disabled students: A review of research. Learning Disabilities Research and Practice, 6(2), 89-98.

McNaughton, D., Hughes, C. A., & Clark, K. (1994). Spelling instruction for students with learning disabilities: Implications for research and practice. Learning Disability Quarterly, 17, 169-185.

Mercer, C. D., & Mercer, A. R. (1993). Teaching students with learning problems (4th ed.). New York: Merrill/Macmillan.

Talbott, E., Lloyd, J. W., & Tankersley, M. (1994). Effects of reading comprehension interventions for students with learning disabilities. Learning Disability Quarterly, 17, 223-232.

In the following examples, a sequential flow of messages is displayed for two separate lists (discussion groups) - *ld-list* and *spedtalk*. The messages have not been

separated by conference area. Instead, they remain in the precise order that they appear in the author's e-mail domain to provide a more realistic outline for the reader.

>To: ld-list@curry.edu
>Subject: Re: Prader-Willi Syndrome
>Content-Length: 298
>Sender: owner-ld-list@curry.edu
>Precedence: bulk
>
>The correct address for the Prader-Willi Syndrome Association is:
>
>Prader-Willi Syndrome Association
>^220 2510 South Brentwood Blvd.
>St. Louis, MO 63144
>314-962-7644 or 800-926-4797
>
>Sorry about the old information posted earlier.

>The Lukas Community
>P.O. Box137
>Temple, NH 03084
>

>Resent-From: <ld-list@east.pima.edu>
>Resent-To: <LD-List@curry.edu>
>Cc: LD-List@east.pima.edu
>Subject: Re: Info on Happy Puppet Syndrome Requested
>Mime-Version: 1.0
>Content-Type: TEXT/PLAIN; charset=US-ASCII
>Content-Length: 714
>Sender: owner-ld-list@curry.edu
>Precedence: bulk
>
>
>> I would appreciate any information on the Happy Puppet Syndrome. It has been
>> suggested that a client of mine may have this syndrome and I would like more
>> information regarding it. If anyone knows anything about this syndrome;
>> symptoms, characteristics, criteria for classification, areas of
>> delay(speech, motor, cognitive), etc. or where I might locate such
>> information, it would be very helpful.
>>
>This is also known as Angelman's Syndrome. I.Q. is generally very low.
>I'll give you more information as soon as I get to work. It's all there. Oh, you might
>search medline, also.
>

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>
>
>Alternate-recipient: prohibited
>Subject: information
>To: spedtalk@virginia.edu
>MIME-version: 1.0
>Content-type: TEXT/PLAIN
>Importance: normal
>Priority: normal
>UA-content-id: D895ZVSTERXQH
>A1-type: MAIL
>Hop-count: 0
>
>Hello Spedders:
>   Has anyone heard of the company "International Learning Systems of
>North America, Inc."? They produce the products "Sing, Spell, Read, &
>Write", "Songs That Teach", and others. They claim to produce Dramatic
>inprovements in Reading ability. Before I advise the staff on this product,
>I am gathering as much data that supports or unsupports this product. If
>anyone knows of these products, please reply off the list at the following
>address:
>Thanks in advance!
>
>Al 'Mc.
>
>Subject: Re: sped under siege; inclusion?
>To: Spedtchr2b@aol.com
>Cc: "spedtalk@virginia.edu" <spedtalk@virginia.edu>
>X-Mailer: ELM [version 2.3.1 PL11]
>
>IDEA requires that placement decisions be made on an individual
>basis and following the preparation of the IEP. It also
>requires that a full continuum of alternative placements be
>available. Those who suggest that all students belong in
>regular classrooms argue against the law. They also invite
>resentment of special education, as it is then seen as a means
>of forcing into regular classrooms students who endanger or
>interfere with the education of their classroom peers. Most
>important, insisting on full inclusion (i.e., all children in
>regular classrooms and neighborhood schools--no self-contained
>classes or special schools, and few, if any, resource rooms)
>prevents the needs of many students from being met. For those
>inquiring about the prospect of including all students with
>emotional or behavioral disorders in regular classes and
>schools, I suggest you see the article I co-authored with John

As can be seen from this brief sample of hundreds of messages the possibilities for communication, professional development and networking with individuals around the world is endless. It must be pointed out that the information reported here is from one listserv. As will be described later there are many listservs related to special education and the reader is cautioned to be selec tive regarding which ones you join. Joining too many will become overwhelming.

Please note that if you join SPEDTALK there is a difference between LISTSERV and MAJORDOMO. They are both programs that serve as discussion vehicles, but there are dissimilarities in the methods for subscribing and unsubscribing.

In addition to dialoguing and getting answers from fellow professionals the information highway assists teachers, researchers clinicians, etc remain current on topics of relevant interest. Continually, articles are placed on the system making information retrieval immediately available. The following article was found on the Internet after a quick search with Veronica through the Gopher system.

A Technology Enhanced Approach to Special Education Personnel Preparation
Dave L. Edyburn
University of Wisconsin-Milwaukee
Herbert J. Rieth, Linda J. Bishop Peabody College, Vanderbilt University

Currently, reform is the clarion cry in teacher preparation. Commissions, legislators, and educators are calling for reforms in teacher preparation programs. Despite the on-going discussion regarding the need for educational reform in higher education, relatively little attention has been focused on instructional improvement. While the role of technology in facilitating fundamental change in education is often cited, it appears that most reform efforts to-date have neglected to utilize information technologies as integral components of school improvement activities. Doyle (1990) argues that several important conceptual and methodological directions are emerging from the intellectual turbulence in teacher education that should help enhance the future of teacher education.

The first is a broadening of the intellectual foundations for teaching and teacher education beyond educational psychology, which focuses on teacher behavior, to other disciplines that focus on understanding contexts. Second, he suggests the use of alternative sources of information from the content field, cognitive studies, and research on pedagogical-content and enactment knowledge that are much richer than process-product findings for conceptualizing practices. Third, new understandings emerging from classroom research clearly suggest that practical teaching knowledge is interpretive and/or procedural rather than simply prescriptive. That is, useful knowledge enables teachers to build on their repertoire of instructional and management skills to: (a) understand classroom curriculum management, and instruction events so that instructional practices can be selected that fit specific classroom situations, and (b) know how to carry out a practice in typical teaching contexts.

Advances in multimedia technology allow teacher trainers to use video to enable students to explore multiple classroom environments (Abate, 1992; Goldman & Barron, 1990). They can view multiple instances of expert teachers modelling effective teaching behavior and solving academic and social behavior problems. The goal is to create

instructional anchors that provide shared information that can be used to develop knowledge about problem solving skills and effective teaching strategies (Cognition and Technology Group at Vanderbilt, 1990). Using multimedia in conjunction with anchored instruction allows the creation of shared environments that permit sustained exploration by students to enable them to understand the kinds of problems and opportunities that expert teachers encounter and the knowledge these experts use as tools. However, the technology itself is not a vehicle for the acquisition of skills or the construction of knowledge (deCorte, 1990; Elliott, 1985; Papert, 1990; Salomon, 1990). Rather, skill acquisition and knowledge construction is embedded in a rich and developmentally appropriate teaching-learning environment.

Technology Enhanced Teacher Training

The project focuses on restructuring teaching and learning in the college classroom through the use of multimedia technology. It addresses a major impediment to the use of technology to restructure instruction and learning in higher education: the absence of accessible easy-to-use software tools and content resources to integrate technology applications into their courses.

To address this impediment, the investigators are developing a powerful, flexible, and integrated software system called, Teaching Assistant. A critical design feature of Teaching Assistant is that it will serve as a multimedia shell for integrating a number of off-the-shelf products which have been specifically selected to enhance two dimensions of faculty productivity: professional and instructional (Gardner & Edyburn, 1993). This approach provides faculty members with a toolkit of software programs (multimedia, word processing, database, spreadsheet, telecommunications, graphing/drawing, desktop publishing, and presentation) that contributes to professional productivity while simultaneously supporting new forms of instructional presentation. As a result, by integrating a number of separate classroom functions, Teaching Assistant serves as a hybrid product that provides college faculty with the necessary tools to use technology in support of their efforts to enhance teaching and learning. Specifically, the software program will be composed of four categories of tools.

References
Abate, R. (1992). The development of multimedia in teacher education. In D. Carey, R. Carey. D. Willis, & J. Willis (Eds.), Technology and Teacher Education Annual, 1992, (pp. 271-275), Charlottesvill, VA: Association for the Advancement of Computing in Education. Cognition and Technology Group at Vanderbilt. (1990). Anchored instruction and its relationship to situated cognition. Educational Researcher, 19, 2-10.

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CAUTION

It is important to note that the uninitiated should beware that there are obstacles on the Information Highway. In some cases there are users who for reasons of their own intentionally attempt to disrupt a particular listserv. The user does this by repeatedly sending the same message. This causes everyone on that listserv to spend a good deal of

time cleaning out their mailboxes. Though I understand that this does not happen often it has happened twice to one of he authors in the past two months.

It should also be mentioned that the amount of information provided is quite extensive. Failure you check your mail on a regular basis can lead to some anxiety in trying to "catch-up" on what you have missed. This is often quite time consuming and the new user should be prepared for this eventuality... Be prepared if you enter this highway to adjust your schedules accordingly. Initially the fear of missing something important is very real. Fortunately, over time this concern diminishes Since every entry has a topic indicated before opening the message, experienced users trash messages that are not relevant to them. and only open those that are of concern.

If you enter into a discussion or wish to respond to an issue you can do so in two ways:
1) reply to the network and let everyone read your response or
2) reply to the individual who has raised the issue. In most cases, along with a message you will receive the individuals e-mail address and you can use this to respond to that individual directly and bypass the "net."

The magnitude of resources on the Internet can be overwhelming if a summary is not available. Appendix A provides a listing of many of the discussion groups (i.e. LISTSERV, COMSERVE, LISTPROC, MAILBASE, MAILSERV, or MAJORDOMO e-mail distributed e-conference) that are related to many types of disabilities. Join as many as you like. There is usually no charge. Be aware, however that the more you join the more mail you will receive.

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Appendix A

Volume 1, Number 1   October 15, 1993
WIDLIST: The WIDnet List of Disability Lists

A list of disability related listservs.

Volume 1, Number 1
October 15, 1993

WIDLIST is published by WIDnet, the Disability Policy Network, a service of:

World Institute on Disability (WID)
510 Sixteenth Street
Oakland, California 94612-1500 USA

Internet: widnet@delphi.com
Telephone: (510) 763-4100 voice/TTY
Fax: (510) 763-4109

To receive a current copy of WIDLIST via Internet Mail, and to be placed on our mailing list for future updates, send your Internet address to widnet@delphi.com. Use the phrase "Request WIDLIST" as the subject of your message.

File WID-000.LST -- October 15, 1993

Contents:

-1- What is a Listserv?
-2- How to Subscribe to a Listserv
-3- The WIDnet List of Disability Lists
-4- The WIDnet List of Other Lists of Interest
-5- How to Get WIDLIST
-6- Appendix A: About WID
-7- Appendix B: About WIDnet
-8- Appendix C: Copyright, Distribution, and Other Pertinent Notices

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WIDLIST CONTAINS A HUGE NUMBER OF REFERENCE CONFERENCES
FROM:

ADAPT-L

American University's ADAPT-L listserve is meant to provide a forum for

librarians and library staff members to discuss adaptive technology issues
affecting patrons and employees with disabilities. +++

TO:

AUTISM

AUTISM on LISTSERV@SJUVM.BITNET

A list has been formed at St. John's University devoted to the
Developmentally Disabled and called Autism. Its purpose is to provide
a forum for those who are Developmentally Disabled, their teachers,
and those interested in this area.

TECH-ED

For those of you that are interested, a new list server for technology
educators has been created. The main purpose for creating the server
is to provide a place for educators to share ideas, projects and
activities, curriculums, or anything else related to teaching
technology. Additionally, it will provide a place where questions can be
asked and answers found.